

Work Order ID 137950

137950

Page 1

October 16, 2015 11:20:09 AM

Item ID: D350-636-015 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.
 Start Date: 10/16/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/30/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: SA Date: 20151016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D4168-041	B

100	Document Control	0.00	DAS 6 9-89					MCS 16-01-21	
100	DOCUMENT CONTROL							15-10-20	
DC	Memo	0.00							
Doc.Control -USB or Paperwork	record fwd angle: <u>89.7°</u>								

Photocopy blue file and type labels per PPP D350-636-015 CHG 005

DAS
28
9-89

JAN 28 2016

B137950LH

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY																																																																																																																											
Environment	☐	Design	☐	Doc/Data	☐	Equip/Tooling	☐	Handling/Pre	☐	Material	☐	Internal Transport	☐	Tribal Knowledge	☐	LOA	☐	Substation	☐	Past Expiry Date	☐	Misidentified	☐	No Re-verification	☐	Operator	☐	Offset/Setup	☐	Supplier	☐	Training	☐	Use for Testing	☐	Poor Information	☐	Rushing	☐	Product Improvement	☐	Process Improvement	☐	Manufacturing Process	☐	Past Due	☐	Pressure/Forced	☐	Bending	☐	Centre Not Concentric	☐	Cracks	☐	Crimp/Kink/Ripple/Wave	☐	Cuffs	☐	Crushing	☐	Heat Treat	☐	Wave/Twist in Tube	☐	Marks/Chatter	☐	Temperature/Cure	☐	Set-up	☐	BOM/Route	☐	Broken/Damage/Defect	☐	Inspection Incomplete/Unqualified	☐	Contamination	☐	Countersink	☐	Cut Too Short	☐	Instructions Incomplete/Unclear	☐	Drill Holes	☐	Power Loss/Surge	☐	Folio/Program	☐	Grain	☐	Weld	☐	Wrong Stock Pulled	☐	Out of Sequence	☐	Off-set	☐	Mislabeled	☐	Fit/Function	☐	Misaligned/off center	☐	Positioned Wrong	☐	Outside Dimensions	☐	Over/Under tolerance	☐	Part Incorrect	☐	Part Lost/Missing	☐	Part Moved	☐	Drawing	☐	Finish	☐	Misread	☐	Turning Sequence	☐
OTHER : _____																																																																																																																															

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Run Start

NR1

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110

0.00

110

Skidtubes

0.02

Skidtubes

Memo

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D4168

3- Drill pilot holes for blade fitting bolt holes using DT8983. Start with 3/16" then open to 0.500" using center drill then ream holes using 0.500" reamer. PIN first side. Repeat process on second side.

ENSURE PROPER POSITIONING FWD BEND MUST BE FACING UP WHEN DRILLING FIRST SIDE

Drill pilot holes as per Dwg D4168 sheet 4 (D4168-1 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail B)

4- Locate DT8330 off of blade fitting bolt holes and drill pilot holes for blade fitting, section H-H. Open to 0.500" using hole saw. VERIFY AND RECORD FWD BEND ANGLE.

5- Drill tow ring hole using DT9616 detail "A"

6- Drill most FWD wearplate hole using DT9678 locating off of 66.54" hole.

7- Open up holes of Detail A to 0.297" (total of 2 holes per side) and .201" (total of 1 hole per side)

8- Weld D2744 Cap as per Dwg D4168 and QSI 004. Fill grooves in bend left from bending as per QSI 004

15-10-20

BE 15-10-21

DQA: _____ Date: _____



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Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cu'ffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter		☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes		☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center		☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence	
				OTHER : ☐							

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A/R Aluminum Rod batch: M132917

9- Grind welds flush as per Dwg D4168

78E15-10-21

120

QC10- Inspect visual per QSI004- ground welds 0.00

120

QC

Memo 0.00

Quality Control

OAS
38
9-89

OCT 22 2015

130

QC5- Inspect part completeness to step on W/O 0.00

130

QC

Memo 0.00

Quality Control

OAS
38
9-89

OCT 22 2015

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Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				OTHER : ☐			

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Stop ***NR2***

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140

Chemical Conversion Coat per QSI005 4.1

0.00

140

HandFinish

Memo

0.01

Hand Finishing

1 Ø 15-10-22 Dec

150

QC7-Inspect Chemical Conversion Coat

0.00

150

QC

Memo

0.00

Quality Control

1 Ø 15-10-22 [Signature]

DQA: _____ Date: _____

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Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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Start Date: 10/16/2015 Start Qty: 1.00

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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160

0.00

160

Skidtubes

Skidtubes

Memo

0.02

1-Open up holes using hole saw of Detail C and ground handling section AL-AL to 0.625" (total of 8 holes per side)
as per dwg D4168.

2-Open up holes using hole saw of Detail B to 0.750" (total of 4 holes per side)
as per dwg D4168.

3- Open float hole to 0.500" using uni-bit (4 per side) section AJ-AJ

Open wearplate holes to size as per dwg (4 holes per sides) , section CG-CG

4-Chamfer holes of Detail B, C, ground handling section AL-AL and float holes section AJ-AJ per dwg D4168 (welding instructions on sheet 8)

5-Deburr and blow out all chips from inside of tube

6- Prepare tube for welding, remove alodine as required.

7-Bond web D2739 in place as per QSI 015, let cure for 12hrs.

A/R Sikaflex-291 batch: 133136

exp. date: 16-2-12

ATTN: USE I-BEAM LOCATION AID (BLADE FITTING)

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D4168 and D4170-1 & QSI004

(welding instructions on sheet 8)

A/R Aluminum Rod batch: m132917

DE 15-11-12

DGC 13-10-22

DQA: _____ Date: _____



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Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
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9- At section AJ-AJ drill out x-bolt spacer to 0.404" *BE 15-11-12*

10-Grind welds flush as per Dwg D4168 *AK 15-11-12*

11-Spot face ground handling holes section (total of 4 places per side) as per *AK 15-11-16*
 dwg D4168, section AL-AL

12- Bore section CG-CG. ADJUST TOOLING AS REQUIRED. *DD 15-11-16*
 VERF BY: *DD*

13- Deburr holes, ensure tube is free of all scratches before sending to *AK 15-11-16*
 paint.

***** FOR DELUXE SKIDTUBE IF APPLICABLE DRILL TOW RING
 HOLE IN TUBE *****
 *****REF TO W/O BATCH: *NIA* *****

170

170

QC

Quality Control

QC10- Inspect visual per QSI004- ground welds 0.00

Memo 0.00

DAS
38
9-89

NOV 17 2015

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180	QC5- Inspect part completeness to step on W/O	0.00							38 9-89
180									
QC	Memo	0.00							
Quality Control	***VERIFY C'BOARD IS GOOD***								NOV 17 2015
190	Pressure Wash per QSI005 4.3	0.00							
190									
HandFinish	Memo	0.01							
Hand Finishing	Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								
200		0.00							
200									
SprayPaint	Memo	0.01							
Spray Painting	1- PRIME AS PER DWG AND QSI 005 4.2 PRIMER PRC DESOTO 515X349 BATCH: <u>132919</u>								
	2- PAINT WHITE AS PER DWG AND QSI 005 4.2 PAINT BATCH: <u>133325</u>								
									DAS 41 9-89 15-11-27

1 15-11-17

DQA: _____ Date: _____



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Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence					
				OTHER :					

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification ☐	☐	Pressure/Forced ☐	☐	Temperature/Cure ☐	☐
Design ☐	☐	Operator ☐	☐	Bending ☐	☐	Set-up ☐	☐
Doc/Data ☐	☐	Offset/Setup ☐	☐	Centre Not Concentric ☐	☐	BOM/Route ☐	☐
Equip/Tooling ☐	☐	Supplier ☐	☐	Cracks ☐	☐	Broken/Damage/Defect ☐	☐
Handling/Pre ☐	☐	Training ☐	☐	Crimp/Kink/Ripple/Wave ☐	☐	Inspection Incomplete/Unqualified ☐	☐
Material ☐	☐	Use for Testing ☐	☐	Cuffs ☐	☐	Contamination ☐	☐
Internal Transport ☐	☐	Poor Information ☐	☐	Crushing ☐	☐	Countersink ☐	☐
Tribal Knowledge ☐	☐	Rushing ☐	☐	Heat Treat ☐	☐	Cut Too Short ☐	☐
LOA ☐	☐	Product Improvement ☐	☐	Wave/Twist in Tube ☐	☐	Instructions Incomplete/Unclear ☐	☐
Substation ☐	☐	Process Improvement ☐	☐	Marks/Chatter ☐	☐	Drill Holes ☐	☐
Past Expiry Date ☐	☐	Manufacturing Process ☐	☐	OTHER : _____			
Misidentified ☐	☐	Past Due ☐	☐				

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Item ID: D350-636-015 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.
 Start Date: 10/16/2015 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 10/30/2015 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 *240* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				1			DAS 38 9-89 JAN 28 2016
250 *250* Packaging Packaging	Pick Kit Memo If making a D350-636-215 pick kit will only requires: 1 X AN3C37A 1 X AN3C34A 1 X AN3C42A 2 X D3493-1	0.00 0.00							DAS 27 9-89 JAN 28 2016
260 *260* QC Quality Control	QC4- 100% Inspect kits for completeness Memo *****ensure antiseize is on AN8C21A bolts*****	0.00 0.00				1			DAS 28 9-89 JAN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐				FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐											

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Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Stop *NS2*

Start Date: 10/16/2015 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 10/30/2015 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NB1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

270

0.00

270

Packaging

0.00

Packaging

Memo.

Packaging

Identify and pack for shipping as per PPPD350-636-015
Location :FG071

27
9-89

DAS JAN 28 2016
28
9-89

280

QC21- Final Inspection - Work Order Release

0.00

280

OC

Memo

0.00

Quality Control

ML5 JAN 28 2016

ML5 JAN 28 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval				
Description Work Order Deviation				Disposition							
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
				OTHER : ☐							

Picklist Print

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Page 1

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP rev:A 10.09.28 new issue DD verf:EC IPP Rev:B
11.04.14 ecn11-553 DD verf:EC IPP Rev:C 11.10.18 as per
NCR 11-906 DD verf:EC IPP Rev:D 112.04.16 AS PER ECN 12-
542 DD verf:EC IPP REV:E 13.08.28 PER ECN13-594 DD
VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

AN3C34A

Purchased

No

230

Each

13.0000

1

1

AN3C34A

BOLT

**

all 15/12/02

Location

Loc Qty

Loc Code

ST348

13

11133483

21

m131618

3

m133077

10

AN3C36A

Purchased

No

230

Each

300.0000

4

4

AN3C36A

Bolt

**

all 15/12/03

Location

Loc Qty

Loc Code

FG

47

101261

4

122204

2

m131367

1

m132169

40

FP001

27

m131856

27

ST338a

152

m132381

80

m132522

72

24

ST347

74

131651

74

Picklist Print

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Page 2

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D3492-1 Manufactured No 230 Each 19.0000 Start Qty: 1.00 8 8 Required Qty: 1.00

D3492-1

Plug

**

10/12/15

Location

Loc Qty

Loc Code

FP001

19

13138-111

45

131952

19

13138053

43

D3492-3

Manufactured No

230

Each

62.0000

8

8

D3492-3

Plug

**

10/12/15

Location

Loc Qty

Loc Code

FP001

62

13134006

48

125905

2

131036

1

131899

10

133470

49

D3873-1

Manufactured No

230

Each

13.0000

7

7

D3873-1

Bushing

**

10/12/15

Location

Loc Qty

Loc Code

FP001

7

13138215

X34

126709

2

129742

5

13136425

ST063

6

134885

6

D4154-041

Manufactured No

230

Each

0.0000

1

1

D4154-041

Wearplate Assembly

**

13138703 (1x1) 10/12/15

Picklist Print

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Page 3

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D4170-1

Manufactured No

230

Each

69.0000

Start Qty: 1.00

Required Qty: 1.00

4 4

D4170-1

Bushing

**

15-11-11

Location

Loc Qty

Loc Code

LG001

69

107896

69

4

D4171-1

Manufactured No

230

Each

18.0000

1

1

D4171-1

Bushing

**

15/12/10

Location

Loc Qty

Loc Code

ST088

18

129060

18

5

MS21043-3

Purchased No

230

Each

690.0000

5

MS21043-3

Nut

**

15/12/10

Location

Loc Qty

Loc Code

FG

80

103691

80

FP001

11

m130673

11

GA

139

m130673

15

m131677

124

ST304

423

m131340

160

m133031

263

ST308

37

m132551

37

5

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1149C0363R

Purchased

No

230

Each

Start Qty: 1.00
1,083.000 9 9

Required Qty: 1.00

NAS1149C0363R

Washer

ll 10/12/07

Location

Loc Qty

Loc Code

FP001

26

114742

26

GA

506

m133077

506

ST260a

494

m133077

494

ST271

57

m130673

20

m132763

37

✓

NAS1515H3L

Purchased

No

230

Each

275.0000 4 4

***NAS1515H3L ***

Washer

ll 10/12/07

Location

Loc Qty

Loc Code

FG

40

102472

40

FP001

55

m127831

55

ST266

180

m127831

40

m130726

140

XJ

NAS1611-010

Purchased

No

230

Each

431.0000 8 8

NAS1611-010

O-RING

ll 10/12/07

Location

Loc Qty

Loc Code

FP001

431

m130770

271

m131618

160

XJ

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Shop Packet Print

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Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1611-013

Purchased

No

230

Each

Start Qty: 1.00
230.0000 8 8

Required Qty: 1.00

NAS1611-013

O-Ring

**

21 11/2/15

Location

Loc Qty

Loc Code

FP001

230

m130758

230

YB

AN3C37A

Purchased

No

250

Each

457.0000 1 1

AN3C37A

BOLT

**

JAN 27 2016

Location

Loc Qty

Loc Code

ST338a

457

131651

70

M128773

1

M129650

55

M131367

70

M131856

70

M132169

70

M132381

70

M132522

51

DAS
28
9-89

DAS
6
9-89

DAS
27
9-89

Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN3C42A

Purchased

No

250

Each

81.0000 Start Qty: 1.00
1 1

Required Qty: 1.00

AN3C42A

Bolt

**

Location

Loc Qty

Loc Code

FG

5

121103

5

ST338a

61

m130485

3

m131856

10

~~m132381~~

8

m132522

10

m132674

10

m133091

10

m133336

10

ST346

15

m131854

5

m131855

10

DAS
28
9-89

DAS
6
9-89

NAS1149D0863J

Purchased

No

250

Each

594.0000 2 2

NAS1149D0863.J

Washer

**

Location

Loc Qty

Loc Code

FP001

49

125484

49

ST260a

415

125268

315

125635

100

ST269

130

125268

130

DAS
28
9-89

JAN 27 2016

DAS
27
6
9-89

Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D2744

Manufactured No

110

Each

Start Qty: 1.00
18.0000 1 1

Required Qty: 1.00

D2744

Cap

**

BE 15-10-21

Location

Loc Qty

Loc Code

LG001

18

128212

4

136178

14

D2600-3-BENT-LH

Manufactured No

110

Each

2.0000 1 1

D2600-3-BENT-LH

Extrusion Bent LH

**

15-10-20

Location

Loc Qty

Loc Code

LG002

2

135767

2

D2743

Manufactured No

160

Each

58.0000 8 8

D2743

Crossbolt Spacer

**

BE 15-11-11
B 137271 x 8

Location

Loc Qty

Loc Code

LG001

58

130731

58

D2739

Manufactured No

160

Each

0.0000 1 1

D2739

350 I Beam

D3490-3

Manufactured No

160

Each

19.0000 4 4

D3490-3

Cross Bolt Spacer

**

BE 15-11-11
B 137807 x 4

Location

Loc Qty

Loc Code

LG

19

130730

19

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Shop Packet Print

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Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D3490-1

Manufactured No

160

Each

Start Qty: 1.00
90.0000 4 4

Required Qty: 1.00

D3490-1

Cross Bolt Spacer

BE15-11-11

Location

Loc Qty

Loc Code

LG

23

133205

23

LG001

67

134019

67

230

Each

556.0000 4 4

10/16/27

ALS4-1032-225

AELS8-1032-225 Purchased

No

AI S4-1032-225

Rivnut

Location

Loc Qty

Loc Code

FG

120

M127028

120

FP001

45

M131582

45

st549

391

M131582

391

133772

xcl

Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN8C35A

Purchased

No

230

Each

Start Qty: 1.00
99.0000 1 1

Required Qty: 1.00

AN8C35A

Bolt

**

11 12/02/03

Location

Loc Qty

Loc Code

FG

5

121275

5

FP001

64

m131947

13

m132169

6

m132381

15

m132522

15

m132674

15

ST273A

30

m133332

15

m133336

15

D3488-041

Manufactured

No

230

Each

4.0000

1

1

D3488-041

Blade Fitting LH

**

B136443 C/L 11 16/02/27

Location

Loc Qty

Loc Code

FP001

4

129601

4

Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN6C44A

Purchased

No

230

Each

Start Qty: 1.00
601.0000 4 4

Required Qty: 1.00

AN6C44A

Bolt

**

all 10/12/03

Location

Loc Qty

Loc Code

FP001

123

131649

100

m131367

1

m132169

22

ST273A

413

m130863

13

m131151

50

m132381

52

m132522

52

m132556

246

ST332

11

m130863

11

ST333

54

m130863

4

m131946

50

MS21083C8

Purchased

No

230

Each

35.0000 1 1

MS21083C8

Nut

**

all 10/12/03

Location

Loc Qty

Loc Code

ST300

35

m132067

2

m133016

19

m133134

14

XL

Picklist Print

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Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

D3631-1

Manufactured No

230

Each

Start Qty: 1.00
178.0000 8 8

Required Qty: 1.00

D3631-1

Washer

**

all 13/12/03

Location

Loc Qty

Loc Code

FP001

178

128320

6

135951

100

136593

72

X8

NAS1149C0332R

Purchased No

230

Each

5,312.000 4 4

NAS1149C0332R

WASHER

**

all 15/12/03

Location

Loc Qty

Loc Code

FP001

1004

m132930

1004

FP01

1521

m133284

1521

GA

441

m133284

441

ST271

2346

m133284

2346

X4

D2745

Manufactured No

230

Each

71.0000 8 8

D2745

Bushing

**

all 15/12/03

Location

Loc Qty

Loc Code

FP001

71

129584

7

131049

14

136214

50

B137731

V2

Picklist Print

October 16, 2015 11:20:16 AM

Page 12

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

NAS1149C0832R

Purchased

No

230

Each

Start Qty: 1.00
99.0000 1 1

Required Qty: 1.00

NAS1149C0832R

Washer

**

all 10/16/15

Location

Loc Qty

Loc Code

ST271

99

m125807

99

AN3C6A

Purchased

No

230

Each

159.0000 4 4

AN3C6A

Bolt

**

all 10/16/15

Location

Loc Qty

Loc Code

CA

39

m128704

39

FG

10

122416

10

ST249

50

m133363

50

ST338a

56

m128769

50

m133077

6

ST349

4

m132767

4

all 10/16/15

Picklist Print

October 16, 2015 11:20:16 AM

Page 13

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

MS21043-6

Purchased

No

230

Each

Start Qty: 1.00
4 4

Required Qty: 1.00

MS21043-6

NUT

**

all 13/12/10

Location

Loc Qty

Loc Code

FG

20

103693

20

11133483

vd

FP001

26

131618

2

m130325

2

m133077

1

m133234

21

ST304

13

m132164

13

D3493-1

Manufactured

No

250

Each

25.0000

2

2

D3493-1

Washer

**

137724

DAS 9-89

DAS 9-89

Location

Loc Qty

Loc Code

FG

10

97201

10

ST039

15

128755

15

MS21083C8

Purchased

No

250

Each

35.0000

2

2

MS21083C8

Nut

**

133577

DAS 27 9-89

Location

Loc Qty

Loc Code

ST300

35

m132067

2

m133016

19

m133134

14

DAS 28 9-89

JAN 27 2010

October 16, 2015 11:20:16 AM

Shop Packet Print

Page 13

Picklist Print

October 16, 2015 11:20:16 AM

Page 14

Work Order ID: 137950

137950

Parent Item: D350-636-015

D350-636-015

Parent Item Name: Skidtube LH, Run-on Landing Wearplates, DART(Apical) Cylind./Aerazur Float Comp.

Start Date: 10/16/2015

Required Date: 10/30/2015

AN8C21A

Purchased

No

250

Each

Start Qty: 1.00
2 2

Required Qty: 1.00

AN8C21A

Bolt

**

DAS 6 27 9-89

DAS 28 9-89

Location

Loc Qty

Loc Code

FG

4

123966

2

m132169

2

ST273A

69

m132542

11

m132674

30

m133332

28

ST332

19

m131100

1

m132169

2

m132381

12

m132522

4

D2741

Manufactured

No

250

Each

28.0000

1

1

D2741

Replacement Blade

**

B135902

DAS 6 27 9-89

Location

Loc Qty

Loc Code

FG

10

131616

10

ST538

18

131616

1

132981

17

DAS 28 9-89

JAN 27 2016

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D4168-041	350 SKIDTUBE ASSEMBLY, LH
	X			D4168-042	350 SKIDTUBE ASSEMBLY, RH
		X		D4168-043	350 SKIDTUBE ASSEMBLY, LH
			X	D4168-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
8	8	8	8	D3631-1	WASHER
7	7	7	7	D3873-1	BUSHING
1	1	1	1	D4154-041	WEARPLATE ASSEMBLY
1				D4168-1	SKIDTUBE WELDMENT, LH
	1			D4168-2	SKIDTUBE WELDMENT, RH
		1		D4168-3	SKIDTUBE WELDMENT, LH
			1	D4168-4	SKIDTUBE WELDMENT, RH
4	4	4	4	D4170-1	SPACER
1	1	1	1	D4171-1	BUSHING
4	4	4	4	ALS4-1032-225	INSERT
4	4	4	4	AN3C6A	BOLT
1	1	1	1	AN3C34A	BOLT
4	4	4	4	AN3C36A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
9	9	9	9	AN960C10	WASHER (OR NAS1149C0363R)
4	4	4	4	AN960C10L	WASHER (OR NAS1149C0332R)
1	1	1	1	AN960C816L	WASHER (OR NAS1149C0832R)
5	5	5	5	MS21043-3	NUT
4	4	4	4	MS21043-6	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

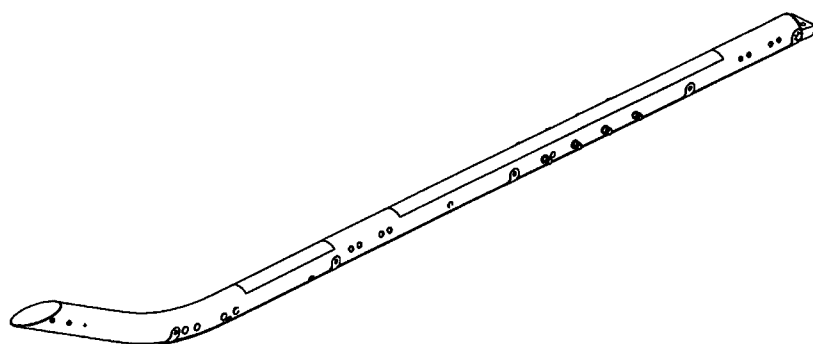
- 1) MATERIAL: MAKE D4168-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
STANDARD: PRIME (REF. 4.2.1.3.3) AND PAINT WHITE PER DART QSI 005 4.2
OPTIONAL POWDER COAT WHITE (REF. 4.3.5.4) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: D4168-041/-042/-043/-044 = 32.3 LBS
- 8) WELD PER DART QSI 004
- 9) FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- 10) COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF
FINISH WITH MEK DEGREASER.
- 11) SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- 12) SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

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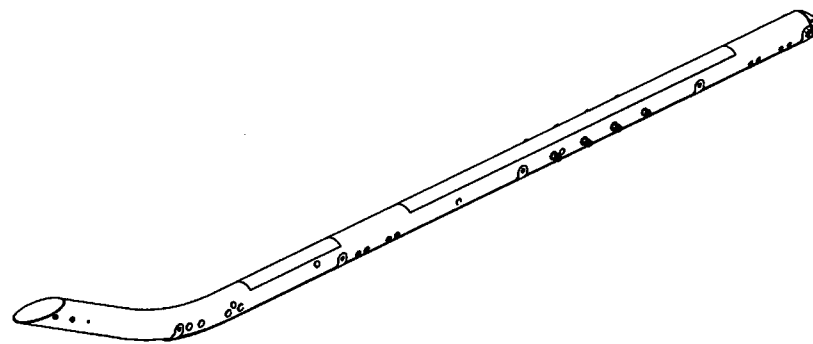
20151016 SH 137950

B	ADD VIEW TO CONTROL FWD BEND ORIENTATION (2N D-1-41-51-61-71); UPDATED FINISH OPTIONS. REASON: PAR13-276 AND NCR13-2757	MB	13.07.11
A	NEW ISSUE	SC	10.08.09
REV.	DESCRIPTION	BY	DATE
DESIGN	SC		
DRAWN	JB		
CHECKED	JP		
MFG. APPR.	JP		
APPROVED	JP		
DE APPR.	JP		
DATE	13.07.11		

DART AEROSPACE USA, INC. KENT, WA	
DRAWING NO. D4168	REV. B
TITLE 350 SKIDTUBE ASSEMBLY	SHEET 1 OF 11
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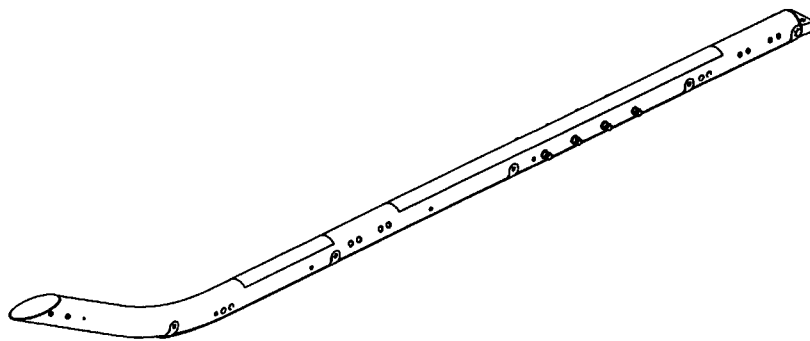
D4168-041 350 SKIDTUBE ASSEMBLY, LH



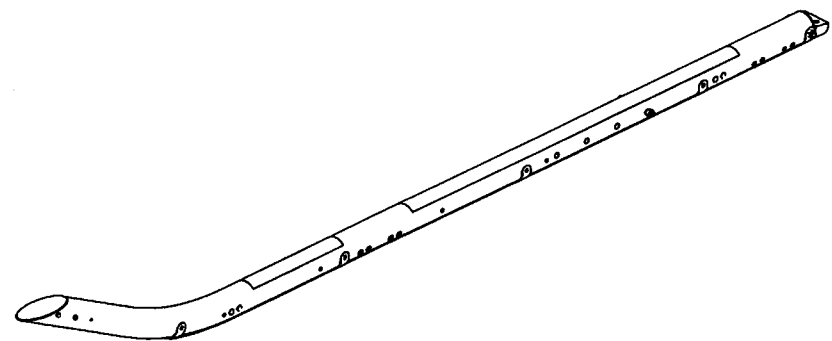
D4168-042 350 SKIDTUBE ASSEMBLY, RH

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MFG. APPR.	SA	D4168	SHEET 2 OF 11
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DE APPR.	SA	350 SKIDTUBE ASSEMBLY	NTS
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D4168-043 350 SKIDTUBE ASSEMBLY, LH

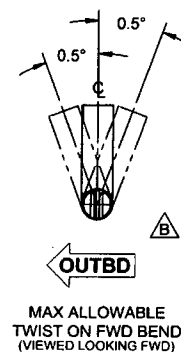
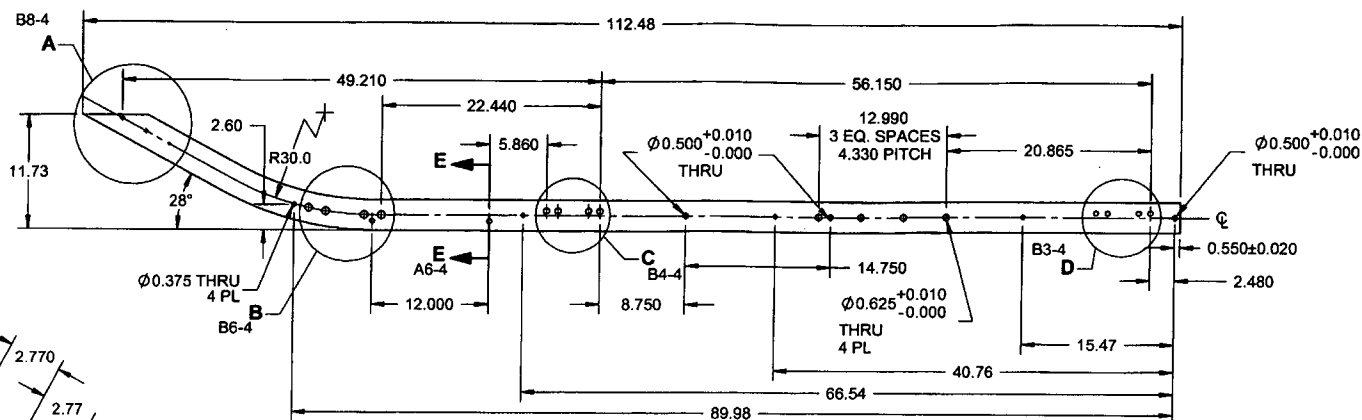


D4168-044 350 SKIDTUBE ASSEMBLY, RH

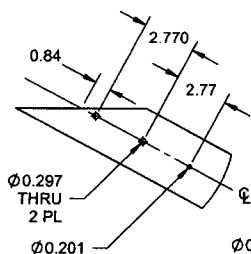
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MFG. APPR.	<i>[Signature]</i>	D4168	SHEET 3 OF 11
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	350 SKIDTUBE ASSEMBLY	NTS
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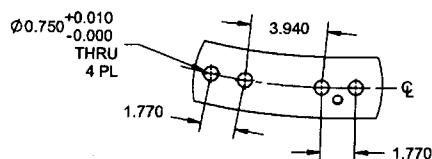
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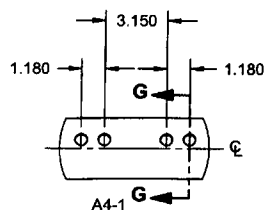
D4168-1 LH SKIDTUBE



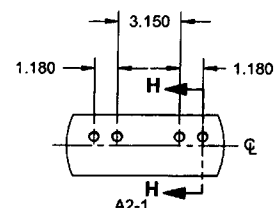
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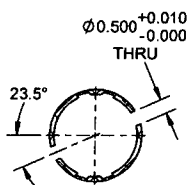
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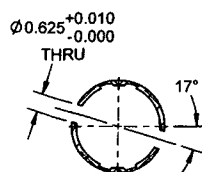
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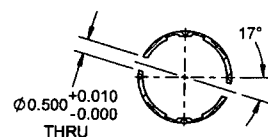
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SCALE 2X



SECTION E-E
SCALE 3X, 2 PL



SECTION G-G
SCALE 3X, 4 PL

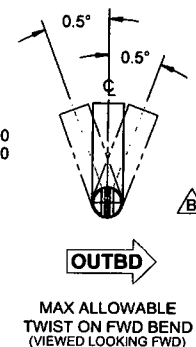
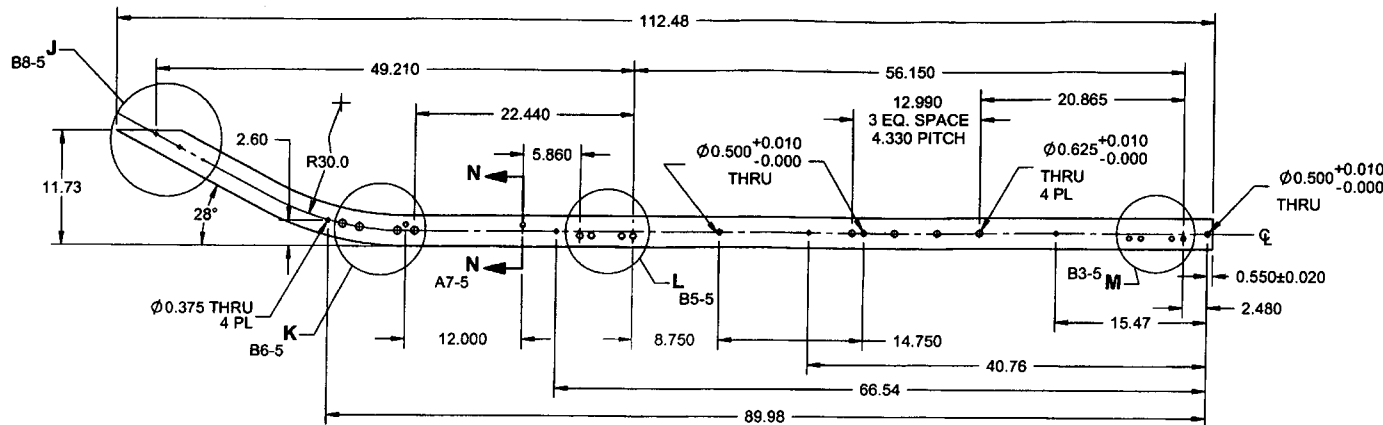


SECTION H-H
SCALE 3X, 4 PL

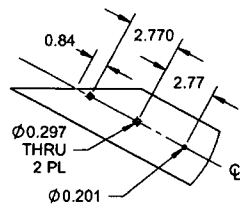
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DE APPR.		DRAWING NO. D4168
DATE 13.07.11		TITLE 350 SKIDTUBE ASSEMBLY
		REV. A SHEET 4 OF 11
		SCALE NTS
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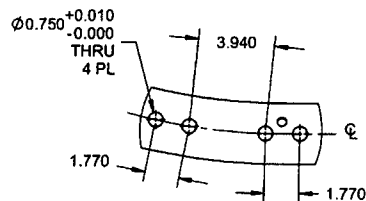
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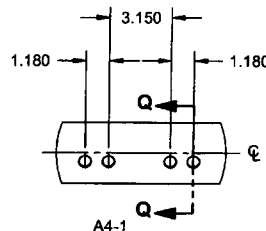
D4168-2 RH SKIDTUBE



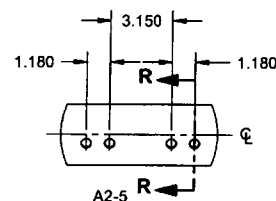
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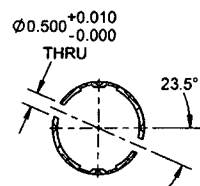
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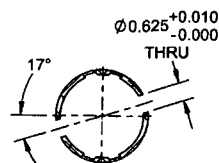
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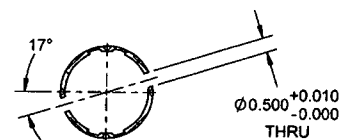
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SCALE 2X



SECTION N-N
SCALE 3X, 2 PL



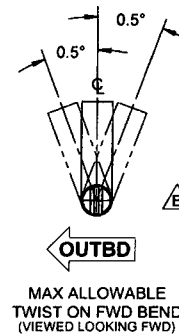
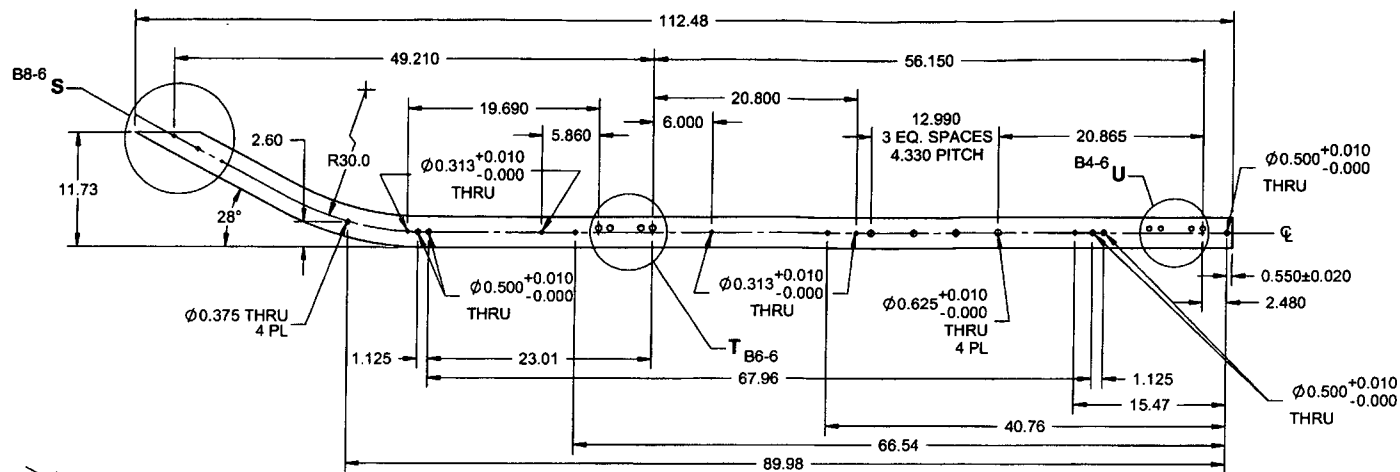
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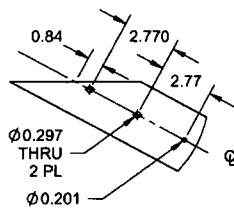
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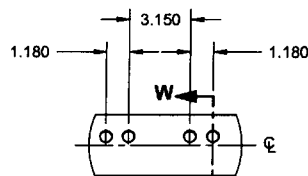
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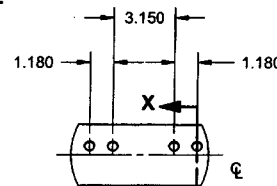
D4168-3 LH SKIDTUBE



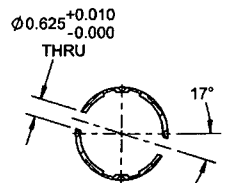
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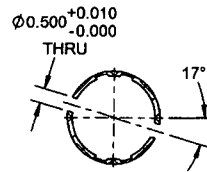
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SCALE 2X



DETAIL U
SCALE 2X



SECTION W-W
SCALE 3X, 4 PL



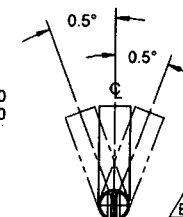
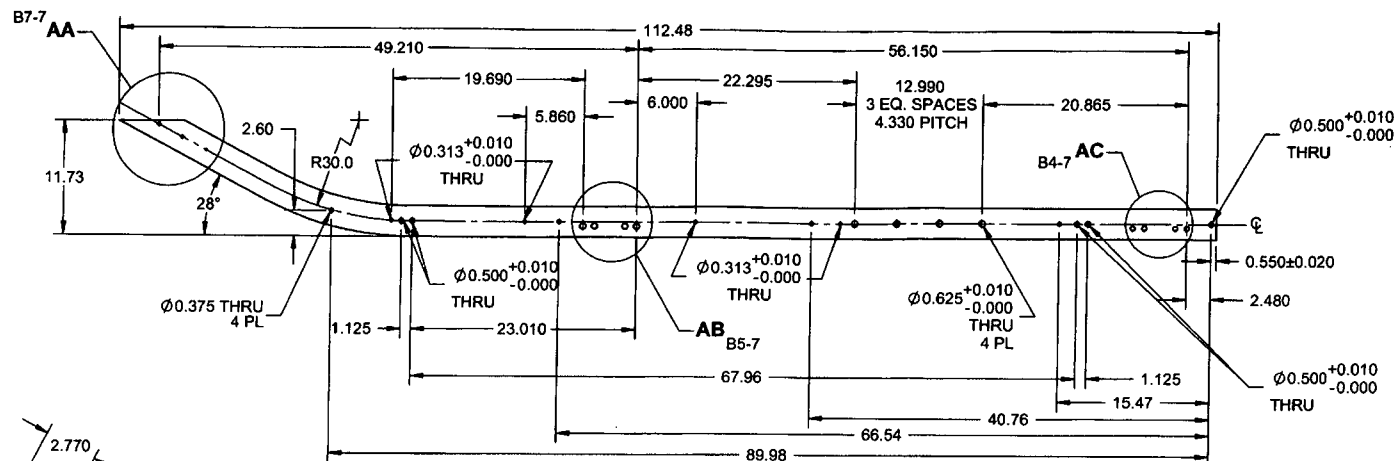
SECTION X-X
SCALE 3X, 4 PL

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DE APPR.
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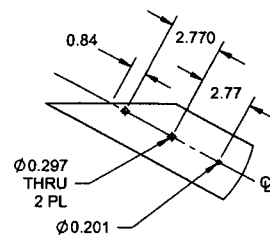
DART AEROSPACE USA, INC.
KENT, WA
DRAWING NO. D4168
TITLE 350 SKIDTUBE ASSEMBLY
REV. B
SHEET 6 OF 11
SCALE NTS
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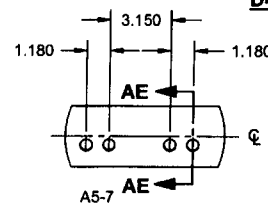


OUTBD

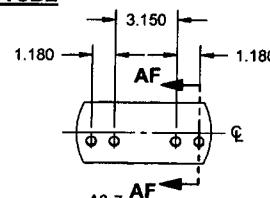
MAX ALLOWABLE
TWIST ON FWD BEND
(VIEWED LOOKING FWD)



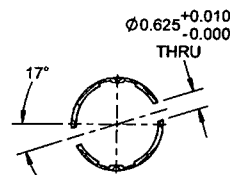
DETAIL AA
SCALE 2X



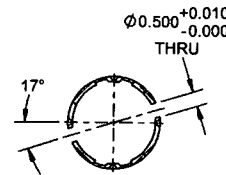
DETAIL AB
SCALE 2X



DETAIL AC
SCALE 2X



SECTION AE-AE
SCALE 3X, 4 PL

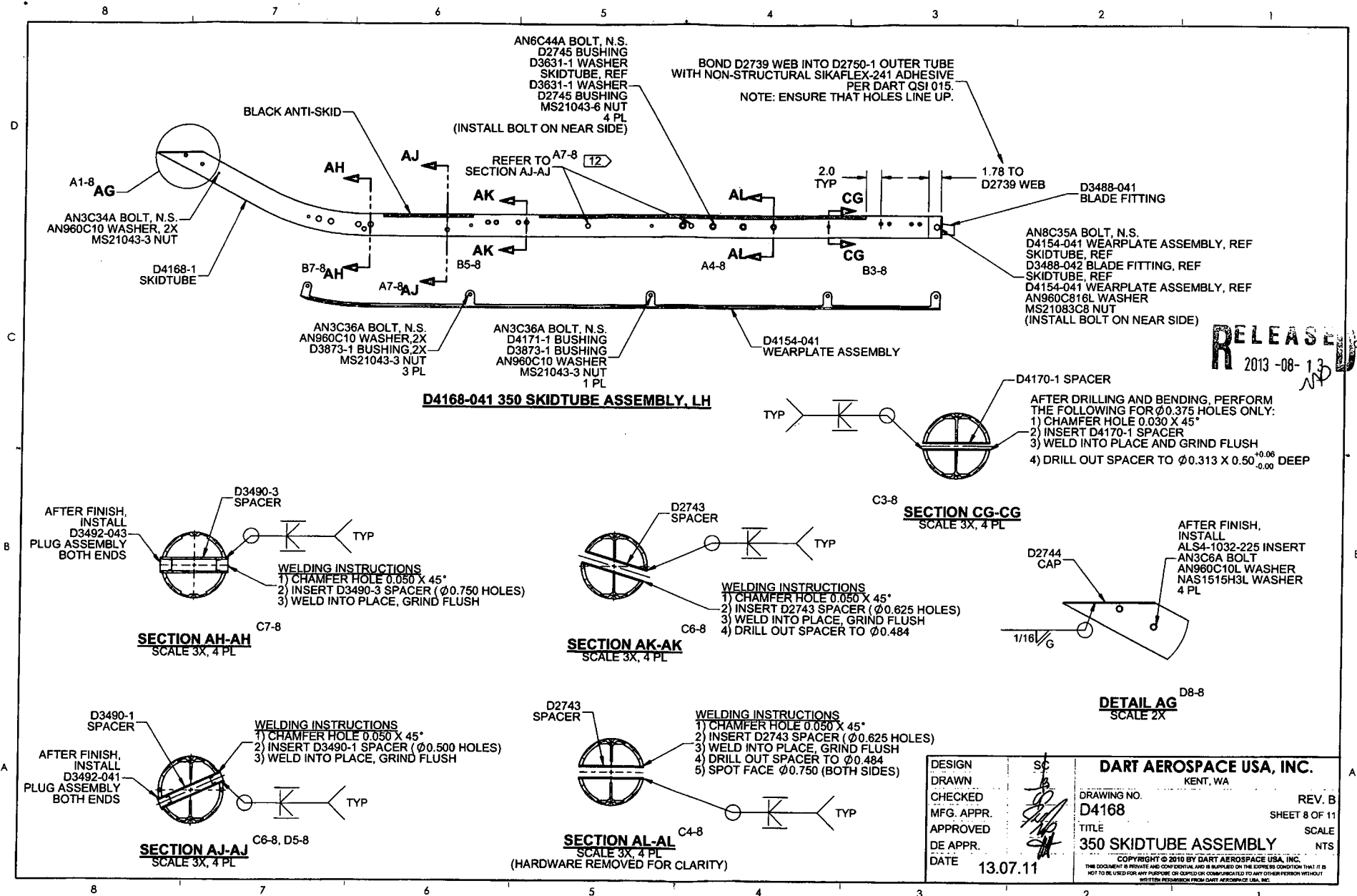


SECTION AF-AF
SCALE 3X, 4 PL

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2013-08-13
JMP

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DRAWING NO. D4168		REV. B
TITLE 350 SKIDTUBE ASSEMBLY		SHEET 7 OF 11
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8 7 6 5 4 3 2 1



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